

# PETROLEUM STORAGE TANK RELEASE TRUST FUND

## MONITORING



Kansas Department of Health and Environment  
Bureau of Environmental Remediation  
Storage Tank Section  
1000 SW Jackson, Suite 410  
Topeka, KS 66612-1367

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## **SECTION 1.0 PROPOSAL PROCESS INFORMATION**

### **1.1 PURPOSE**

On behalf of the Owner/Operator (O/O), the Kansas Department of Health and Environment (KDHE) is soliciting bids from qualified Vendors to implement a groundwater monitoring plan. The plan is designed to track the levels of contaminants detected at the site.

### **1.2 OBJECTIVE**

- 1.2.1 To provide information necessary for the preparation of competitive proposals by qualified Vendors.
- 1.2.2 To provide for a fair and objective evaluation of proposals.
- 1.2.3 To result in a contract between the O/O and the Vendor to provide the services as described in Sections 3.0 and 4.0 of this Request for Proposal (RFP).

### **1.3 DEFINITIONS**

- 1.3.1 "Corrective Action" means all action necessary to contain, collect, control, identify, analyze, clean up, treat, disperse, remove, or dispose of soils and groundwater contaminated by a release of petroleum products from a storage tank.
- 1.3.2 "Hazardous substance" shall have the meaning ascribed to such term by section 101 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 of the United States as in effect on January 1, 1992.
- 1.3.3 "Release" means any spilling, leaking, pumping, pouring, emitting, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, including the abandonment or discarding of barrels, containers, and other closed receptacles containing any Hazardous substance.
- 1.3.4 "Petroleum" means petroleum, including crude oil or any fraction thereof, which is liquid at standard conditions of temperature and pressure, including but not limited to: gasoline, gasohol, diesel fuel, fuel oils and kerosene.
- 1.3.5 "Other pollutant" means any substance determined by the Secretary of Health and Environment that poses a substantial present or potential hazard to human health or the environment when released. The term does not include radioactive materials regulated by K.S.A. 48-16-01 et seq.
- 1.3.6 "Vendor" means any individual, partnership, association or corporation who is seeking or is chosen to enter into a procurement contract with the O/O.

- 1.3.7 "Project Manager" means the KDHE staff geologist or environmental scientist designated to be the lead technical interface with the vendor.
- 1.3.8 "Field Geologist" is the designated site representative for the vendor. This position works under the direct supervision of the vendor's designated "Project Geologist". Minimum qualifications for this position are:
- 1) Has a BS degree in Geology from an accredited four year college or a related degree with a minimum of 30 semester hours of geologic course work.
  - 2) Has overseen drilling activities and has described and recorded the subsurface lithology during the drilling of at least 21 boreholes.
- 1.3.9 "Licensed Professional" is the designated site representative for the Vendor, or the designated supervisor of the vendor's "Field Geologist(s)". Minimum qualifications for this position are 1) must have a valid and current professional license through the Kansas State Board of Technical Professions, and 2) must be technically qualified to interpret geologic data. This position is responsible for the preparation and certification of all geological information in reports and on maps.
- 1.3.10 "Sampling Technician" means a vendor representative qualified to perform certain on-site activities as specified in the RFP. In order to meet the minimum qualifications for a sampling technician, the individual must have: 1) knowledge of EPA/KDHE sampling protocol, and 2) collected laboratory groundwater samples from at least 30 monitoring wells.
- 1.3.11 "Trained Professional" means a vendor representative with a Bachelor's degree in a Natural Science field from an accredited four year college or a related degree with a minimum of 30 hours of geologic, hydrogeologic or environmental science course work.

## 1.4 INQUIRIES

- 1.4.1 All inquiries concerning this RFP must be submitted in writing to:

Petroleum Storage Tank Release Trust Fund  
1000 SW Jackson, Suite 410  
Topeka, KS 66612-1367  
**Attn: Julie Turner** FAX: (785) 296-6190

- 1.4.2 Answers to all written questions will be distributed to all participating prospective Vendors by mail.
- 1.4.3 In all cases, no verbal communication will override written communications and only communications in writing are binding.

## 1.5 REVISIONS TO THE REQUEST FOR PROPOSAL

In the event it becomes necessary to revise any part of this RFP, revisions will be provided in writing

to all Vendors to whom KDHE has sent the RFP.

## **1.6 SUBCONTRACTORS**

If the Vendor intends to subcontract any part of the work to be performed under this RFP, the Vendor must include, in its proposal, a complete list of potential subcontractors and a description of the work to be subcontracted. The Vendor is responsible for assuring that its subcontractors possess all licenses and/or certifications as required by the State of Kansas for the services they will provide.

## **1.7 SUBMISSION OF PROPOSAL**

Two (2) sealed copies of the proposals must be received by the Petroleum Storage Tank Release Trust Fund no later than 3:00 p.m. on the date specified in the Project Information Sheet and the Monitoring Bid Proposal Sheet. Proposals should be addressed to:

Petroleum Storage Tank Release Trust Fund  
1000 SW Jackson, Suite 410  
Topeka, KS 66612-1367  
**Attn: Mickey Trimble**

- 1.7.1 The outside of the envelope must be marked "**SEALED BID**" in bold lettering. . The bid number(s) of the enclosed bid(s) must be displayed on the outside of the envelope. All bids sent in the same envelope must have the same bid deadline. Failure to properly mark the outside of the envelope may result in the bid(s) being disqualified.
- 1.7.2 Late proposals will not be opened. A letter notifying the Vendor, and documentation that the proposal was received after the deadline, will be mailed to the Vendor. The proposal will be stored in KDHE files.
- 1.7.3 KDHE and/or the O/O will not pay for any information herein requested, nor are they liable for any costs incurred by the Vendor to prepare or submit a proposal.
- 1.7.4 All proposals shall be submitted on the Project Bid Proposal Sheet (EXHIBIT 2).
- 1.7.5 KDHE will forward to the O/O a copy of the proposals received by the deadline.

## **1.8 WITHDRAWAL OF BIDS**

A Vendor may withdraw a bid at any time prior to the scheduled closing time for receipt of proposals.

## **1.9 PROPOSAL OBLIGATIONS**

The contents of the proposal and any clarification thereto submitted by the successful Vendor shall become part of the contractual obligation and will be incorporated by reference into the ensuing

contract.

#### **1.10 TERM OF PROPOSAL**

All proposals shall be firm for a period of ninety (90) days after the proposal due date to allow time for evaluation of all proposals and to make an award.

#### **1.11 DISPOSITION OF PROPOSALS**

All proposals become the property of the State of Kansas upon receipt and will not be returned to the Vendor. The State of Kansas shall have the right to use all ideas or adaptation of ideas contained in any proposal received in response to this RFP. Selection or rejection of the proposal will not affect this right.

#### **1.12 NOTIFICATION OF APPROVED COSTS**

After evaluation of the proposals, all Vendors who submitted proposals will be notified in writing of the approved costs for the Project.

#### **1.13 EVALUATION CRITERIA**

Due to the variable nature of sites being monitored, bids will be reviewed to ensure that line item costs are equitably distributed across all required tasks. Prices must accurately reflect the actual cost to complete each segment of the project because additional scopes of work may be required. To avoid the potential problem of vendors unfairly "loading" costs into certain categories to avoid cost proration, KDHE Trust Fund bid proposals will be evaluated on a line item basis. KDHE will review individual line item rates with respect to bids from other vendors for the same project, and to historical costs.

An explanation of all higher or lower than published reasonable line item costs must be included with the proposal. If an explanation is not submitted with the original bid, or the explanation is deemed to be inadequate, the bid may be rejected as unresponsive. The fact that previous bids may have been approved with unreasonable line item costs does not mean that future bids with similar costs will be approved.

The following procedure must be used in preparing the bid package:

If a line item unit rate is bid as zero (0) or is left blank, and the activity associated with that line item is required to complete the scope of work, the bid will be rejected as unresponsive.

The unit rate and line item total cost should be entered as "Included" (INC) if the unit cost for that line item is included in the rate for another line item. The line item in which it is included must be specified.

The unit rate and line item total cost should be entered as "NC" if it is proposed to perform the activity at no cost. "NC" will be taken to mean that the no charge rate will apply not only to the original scope of work, but will also apply to any additional scope of work within the geographic area.

KDHE reserves the right to approve or deny proposed rates and/or quantities on a line item basis. If deemed to be in the best interest of the O/O and the State, KDHE may propose reduced but reasonable (as determined by KDHE using the criteria above) costs for specific line items, and approve the revised total project cost. If the vendor is not willing to perform the task(s) at the reasonable rate, they may withdraw their bid. KDHE will not allow costs to be moved between line items to meet the reasonable cost requirement after the bid closing date.

In addition to the above described line item cost evaluation, proposals will be evaluated on the Vendor's 1) total cost as submitted on the Project Bid Proposal Sheets, 2) experience, 3) expertise, and 4) past performance on KDHE Trust Fund Sites. The final determination of approved costs for the project will be in the best interest of the O/O and KDHE.

#### **1.14 CONFLICTS OR AMBIGUITIES**

Vendors shall notify KDHE immediately if conflicts or ambiguities are found in the Request For Proposal. Failure to do so prior to the specified closing date may result in these items being resolved in a manner deemed to be in the State's best interest as judged by the KDHE Storage Tank Staff.

## **SECTION 2 CONTRACT INFORMATION**

### **2.1 PURPOSE**

This section outlines the type of contract contemplated and sets forth contract clauses that must be contained in any resultant contract.

### **2.2 CONTRACT DOCUMENT**

- 2.2.1 The Contract between the O/O and Vendor shall consist of, at a minimum, the following:  
1) This RFP and any amendments thereto, 2) the Vendor's proposal submitted in response to the RFP, and 3) the Contractual Provisions form # O/O 101, 7/92 (see ATTACHMENT G) or equivalent.
- 2.2.2 For the purpose of contract uniformity, the O/O's standard form contract and Contractual Provisions (ATTACHMENT G) may be utilized.
- 2.2.3 In the event of any inconsistency or contradiction between this RFP and the Vendor's proposal and/or contract form, the provisions of this RFP are controlling regarding reimbursement to be provided by KDHE.
- 2.2.4 The contract between the O/O and the Vendor will be signed by both parties within 14 days following approval costs.

### **2.3 RESPONSIBILITIES**

- 2.3.1 The O/O is responsible for assuring the monitoring program is conducted in accordance with the KDHE specification described in SECTIONS 3.0, 4.0, and 5.0.
- 2.3.2 The O/O and the Vendor selected to perform this scope of work are responsible for maintaining the initial project costs approved by KDHE. Any change to the value of this contract will be in accordance with the Vendor's proposed unit pricing and must be approved in writing by KDHE prior to the Vendor commencing work. KDHE reserves the right to deny any changes.
- 2.3.3 The O/O and the Vendor are responsible for securing and complying with any and all federal, State of Kansas and local permits and regulations regarding the Scope of Work defined in this RFP.

### **2.4 ERRORS IN PREPARATION**

The Vendor is responsible for any mathematical error or incorrect extension of any calculations in the Vendor's price quotes. In case of discrepancies, the Vendor unit cost will be multiplied by the units provided and the resultant unit price will be used in the evaluation. Any proposal with an error will be disqualified if there is a five percent or less difference between it and the next lowest



qualified proposal. If the percent difference is greater than five percent, the corrected amount will be considered the Vendor's submission and be subject to approval.

## **2.5 CONTRACT AMENDMENTS**

Any modification, amendment or extension to a contract resulting from this RFP must be in writing. The O/O must receive prior written approval from KDHE for the changes. KDHE reserves the right to deny any modifications, amendments, or extensions.

## **2.6 COMPLIANCE WITH LAW**

The Vendor agrees to comply with all applicable federal, state, and local laws, rules regulations and ordinances; and all provisions required thereby to be included herein, are hereby incorporated by reference. The Vendor agrees to indemnify and hold the O/O and KDHE harmless from any loss, damage, or liability resulting from the violation on the part of the Vendor of such laws, rules, regulations, or ordinances.

## **2.7 SEVERABILITY**

The invalidity in whole or part of any provision of the contract shall not void or affect the validity of any other provision.

## **2.8 ASSIGNMENT, TRANSFER, CONVEYANCE, SUBCONTRACT, AND DISPOSAL**

The Vendor shall not assign, transfer, convey, subcontract, or dispose of any contract resulting from this RFP, or its rights, title, interest, or power to execute such assignments to any other person, company, corporation, or entity without written consent of the O/O and KDHE.

## **2.9 INSURANCE**

The Vendor shall maintain, at its expense during the term of the contract, the following insurance covering the services to be performed under this contract:

2.9.1 Workmen's compensation-statutory

2.9.2 Employers liability insurance in the minimum amount of \$500,000.00 per occurrence with a \$1,000,000.00 aggregate.

2.9.3 Comprehensive general liability insurance of \$1,000,000.00 per occurrence with a \$1,000,000.00 aggregate.

2.9.4 Vehicle liability (property damage and bodily injury combined) \$500,000.00 per occurrence.

2.9.5 Professional liability insurance of \$1,000,000.00 per occurrence with a \$1,000,000.00 aggregate.

2.9.6 The successful Vendor will provide the O/O, within twenty (20) working days of the contract signing, a certificate of insurance (Accord Form 25-S) naming the O/O as the certificate holder. The cancellation clause of the Accord Form will read as follows:

**"Should any of the above described policies be cancelled before the expiration date thereof, the issuing company will endeavor to mail 10 days written notice to the certificate holder named to the left, but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives."**

A copy of this document must be provided to the KDHE within the same 20 working days period.

## **2.10 INDEMNIFICATION**

Neither the O/O nor KDHE shall be liable for any damage or compensation payable by law in respect to or in consequence of any accident or injury to any worker or other person in the employment of the Vendor or any subcontractor, save and except an accident or injury resulting from a willful negligent act or default of the O/O or KDHE.

The Vendor shall indemnify and keep indemnified the O/O and KDHE against all such damages and compensation, save and except as aforesaid, and against all claims, proceedings, costs, charges, and expenses whatsoever in respect thereof or in relation thereto.

## **2.11 COMMUNICATION AND NOTICES**

Any written notice to the Vendor shall be deemed sufficient when deposited in the United States mail, postage prepaid, and addressed to the Vendor at its address listed on the signature page of the contract or at such address as the Vendor may have requested in writing, or which is hand carried and presented to an authorized employee of the Vendor at its address as listed on the signature page of the contract.

## **2.12 TERMINATION**

### **2.12.1 Termination for cause**

The O/O or the Vendor may terminate the contract resulting from this RFP at any time when either Party fails to carry out its obligations under the provisions of this RFP or fails to make substantial progress under the terms specified in the RFP and the resulting proposal and contract.

2.12.2 The O/O shall provide the Vendor with written notice of conditions adversely affecting performance. If after such notice the Vendor fails to remedy the conditions contained in the notice within ten (10) days, the O/O may issue the Vendor an order to stop work immediately and exercise their right to terminate the contract.

2.12.3 The Vendor shall provide the O/O with written notice of conditions adversely affecting performance. If after such notice the O/O fails to remedy the conditions contained in the notice within ten (10) days, the Vendor may exercise their right to terminate the contract.

2.12.4 The O/O shall be obligated only for the services performed in accordance with the RFP specifications prior to the date of termination notice.

## **2.13 WAIVER**

In the event of breach of contract or any provision thereof, the failure of the O/O to exercise any of its rights or remedies under this contract shall not be construed as a waiver of any such provision of the contract breached or as an acquiescence in the breach. The remedies herein reserved shall be cumulative and additional to any other remedies at law.

## **SECTION 3.0 STATEMENT OF WORK**

### **3.1 GENERAL INFORMATION**

- 3.1.1 The following information is provided to assist the O/O in obtaining proposals for the scope of work necessary to accomplish the goals outlined herein.
- 3.1.2 The Vendor may modify the scope of work; however, all modifications and justification for the modifications must be identified as such in the proposal. Modifications to the proposal must be approved in writing by KDHE prior to the initiation of work.
- 3.1.3 Vendor is responsible for insuring that work performed under this contract complies with all applicable standard operating procedures (SOP's) as included in KDHE-Division of Environment Quality Management Plan (QMP) 2001 or directed by the KDHE Project Manager if it is determined by the KDHE that more rigorous operating procedures are warranted. The KDHE-Division of Environment (QMP) 2001 can be obtained from KDHE or from the KDHE website at <http://www.kdhe.state.ks.us/ber>.
- 3.1.4 KDHE reserves the right to reject any modification to proposals.
- 3.1.5 Definitions of line items in the Project Bid Proposal Sheet and Work Specific terms can be found in SECTION 6.0 of this bid package.
- 3.1.6 The KDHE Project Manager or their supervisor will be notified **immediately by telephone** if any contamination is detected in any drinking supply well. KDHE will be notified immediately if any public or private well is found to be impacted or in danger of being impacted during the current monitoring event. KDHE should also be notified if damage to any of the monitoring wells is encountered.

### **3.2 SITE INFORMATION**

- 3.2.1 Review the site specific information for each site in EXHIBIT 1. Conduct the work described therein following the requirements outlined in this document.

### **3.3 MONITORING FIELD WORK**

#### **3.3.1 Monitoring Goals**

- 3.3.1.1 Complete the monitoring program in accordance with all requirements outlined in this document.
- 3.3.1.2 Obtain and develop sufficient data during the monitoring so the potential risk to the environment and human health can be evaluated and a recommendation can be made regarding future work to be conducted at the site.
- 3.3.1.3 The Vendor is responsible for meeting the Goals outlined in this section and Section 4.0, Deliverables.

#### **3.3.2 Monitoring Work Scope**

- 3.3.2.1 All groundwater sampling must be performed by a qualified Sampling Technician as defined in SECTION 1.3.10.
- 3.3.2.2 One groundwater sample will be collected from each of the wells indicated in the site specific information (SSI). All groundwater samples for the same site will be collected within the same 24 hour period. All groundwater samples will be obtained within 45 days of the report due date unless otherwise specified by the Project Manager. The frequency of the sampling events must be as specified on the SSI, unless amended in writing by the KDHE Project Manager.
- 3.3.2.3 All monitoring wells must be properly purged by removing as close to three well volumes of water prior to sampling as possible. Purging of low yield wells will require the vendor to manage field activities such that approved staff time is utilized to maximize the amount of purge water that is removed from each well.  
  
The Vendor must allow the water levels in the purged wells to return to static conditions before taking a groundwater sample for analysis. In low yield wells, the Vendor must allow the groundwater to return as close as possible to static conditions before taking a groundwater sample for analysis.  
  
If static conditions are not attained or if 3 well volumes of water cannot be purged before groundwater samples are taken, the Vendor must document the reasons and include as part of the field notes.
- 3.3.2.4 Groundwater samples will not be collected for laboratory analysis if separate phase hydrocarbon product is present in the well. The Vendor shall document the complete description of the product, including thickness of the product layer, color, odor, viscosity, and indicate the type of product suspected.
- 3.3.2.5 If indicated on the site specific information, a sample of the hydrocarbon product will be

collected from the well and will be analyzed by a KDHE certified laboratory. The analysis will indicate the type of fuel detected and the Vendor will include a copy of the analysis and chromatogram obtained from the laboratory.

- 3.3.2.6 All laboratory analyses will be performed by a laboratory certified by KDHE for the specific analyte and laboratory method, if certification is available for the proposed method, as outlined in ATTACHMENT C. Groundwater samples will be submitted for laboratory analysis for the following: benzene, toluene, ethylbenzene, xylenes (BTEX), 1,2 DCA, naphthalene, and MtBE.
- 3.3.2.7 All samples designated for laboratory analysis will immediately, upon collection, be containerized and sealed in a laboratory approved sample container laboratory approved for the constituent(s) of concern, and will be properly preserved and transported to the laboratory. Product samples will be transported in a separate container from groundwater and soil samples.
- 3.3.2.8 An attempt must be made to locate all wells to be sampled utilizing a metal detector and existing survey data.
- 3.3.2.9 One trip blank will accompany each sample container. Trip blanks should be obtained from the lab performing the analysis. Costs for analysis of any and all samples for which the required QA/QC data (see appendix 1) have not been submitted will not be eligible for reimbursement. If the analytical results from the Vendor's subcontracting laboratory cannot be confirmed by the QA/QC data, the Vendor may be required to resample all monitoring wells at the Vendors' expense.
- 3.3.2.10 If indicated on the site specific information sheet, the removal of separate phase product may be required. All product removed from the site must be recycled and the KDHE project manager must be notified and approve of the recycling facility. Recovered separate phase product must be containerized, transported and stored in accordance with all local, state and federal laws.

### **3.3.3 Waste Disposal**

- 3.3.3.1 All waste water generated during the monitoring program will be treated and disposed of in accordance with all local, state, and federal statutes and regulations. The procedures outlined in Section 6.0 for waste water handling must be followed unless other methods have been pre-approved by the KDHE Project Manager. NO waste water is to be stored on site for any reason.

### **3.3.4 Property Restoration**

- 3.3.4.1 Any property damaged or destroyed during this monitoring program must be restored to its original condition within 30 calendar days after the damage or destruction occurred. All costs associated with the restoration are the responsibility of the Vendor unless the

work is performed to restore the decommissioning of monitoring wells or other project related and pre-approved restoration.

- 3.3.4.2 If any professionally landscaped areas are disturbed during investigation activities, the Vendor must contract with a Landscape Professional to conduct the necessary repairs. Documentation of the contract will be required.

### **3.4 MONITORING RENEWALS**

#### **3.4.1 Renewal Scope of Work - Additional Scope of Work**

- 3.4.1.1 Install new bailers and twine during the first event, to collect groundwater samples for each event of the current scope of work. The wells to be sampled will be indicated on the approval letter. If free product is detected in any well, the thickness of the product must be measured and recorded. Do not collect water samples from any well in which free product is observed.

- 3.4.1.2 Submit the groundwater sample for laboratory analysis for the following: benzene, toluene, ethylbenzene, xylenes (BTEX), 1, 2, DCA, naphthalene, and MtBE. If contamination is detected in any drinking supply well, the KDHE Project Manager or their supervisor must be notified by telephone immediately.

- 3.4.1.3 Collect groundwater elevation data from each monitoring well, during each sampling event to determine current hydraulic gradient and groundwater flow directions.

- 3.4.1.4 Submit two copies of the monitoring report containing the following data:

Observations from the current sampling event, which shall consist of a brief discussion of groundwater elevation, groundwater flow direction, and contaminant degree and distribution; note whether or not any changes have occurred since the last event, and if any wells need repairs or replacement.

A site base map depicting the groundwater elevation of each monitoring well (sampled or not sampled) and direction of groundwater flow for the current sampling event.

A table including groundwater analytical results for all sampling events conducted as part of the original investigation and all past and current sampling events.

A site base map depicting BTEX concentration isocontours, or other maps developed previously during monitoring scope of work, for the current sampling event.

Laboratory analytical and QA/QC reports for the current sampling event.

Field notes for the sampling event recording water depth and volume of water purged

for each well.

Well lock information indicating the KDHE well lock number(s) removed and replaced from each monitoring well location.

It should be noted in the report and on the groundwater elevation table, all wells that the screen interval is completely under the static water level.

3.4.1.5 Notify KDHE personnel at least **one week prior to sampling on 50%** of the monitoring events. Notifications (ATTACHMENT E) must be faxed, emailed or mailed to the attention of the KDHE Project Manager and the associated district office. Notifications must include the site name, KDHE site ID #, date to be sampled, approximate time the vendor will be on-site for sampling, and the sampling technician's cell phone number. The KDHE Project Manager and the designated District Office Representative shall be notified by telephone, fax, or email if there are any revisions to the original notification. Costs for the monitoring event may be denied if KDHE is not notified as specified in this RFP.

3.4.1.6 Label the final report for the monitoring scope of work as the Final Report. Within the final report; summarize all observations of the analytical results, groundwater elevation, and groundwater flow for the time period covered in the scope of work. A recommendation for closure, further monitoring, or corrective action must be included in the final report.

3.4.1.7 Perform and discuss any other approved work or activities necessary to accomplish the monitoring project, including waste water handling, disposal methods, and locating covered or missing wells using all appropriate means. The use of metal detectors, reverse surveying techniques and disposal methods should be discussed with the KDHE Project Manager before submitting costs.

3.4.1.8 A completed monitoring event summary page (ATTACHMENT D) will be included with each invoice and RFR in order for monitoring costs to be reimbursed. An incomplete or missing summary page may delay or prevent reimbursement.

3.4.1.9 The Vendor and the KDHE Project Manager may negotiate the first report due date for renewals.

### **3.4.2 Renewal / Additional Scopes of Work Costs**

3.4.2.1 All costs associated with monitoring renewals and additional scopes of work will be negotiated by a deadline set by the KDHE Project Manager. If costs are not negotiated by the deadline set by the KDHE Project Manager, KDHE may consider the scope of work for bid or utilize the state corrective action contract. All additional scopes of work will be assigned a deadline date for completion. If the completion deadline date is not met by the vendor, KDHE reserves the right to deny partial or complete costs for the approved additional scope of work.

### **3.5 Miscellaneous - Additional Scopes of Work**

**3.5.1 KDHE may ask for additional scopes of work on sites in the monitoring program to address a variety of issues related to a particular site. All additional scopes of work will be negotiated with the KDHE Project Manager and the current monitoring vendor for each facility by the deadline set by the KDHE Project Manager. All additional scopes of work will be assigned a deadline date for completion. If the completion deadline date is not met by the vendor, KDHE reserves the right to deny partial or complete costs for the approved additional scope of work. Notifications must be made to the KDHE Project Manager, the designated District Office, the O/O, and the current property owner or lessee (See 3.4.1.5) prior to the initiation of any additional scope of work. KDHE reserves the right to deny partial or complete costs if the Notification requirement is not met. The additional scopes of work may include but not be limited to include the following:**

#### **3.5.2 Probe Survey**

3.5.2.1 If a probe survey is required, an additional scope of work will be negotiated between the KDHE Project Manager and the current vendor. The primary goal of the survey will be to better define the extent of current groundwater and soil contamination; the secondary goal of the survey will be to define the degree of groundwater and soil contamination within the contaminated area.

A separate report must be submitted after the probe survey is complete. The probe survey report must include a brief summary of field activities, a table summarizing the results of the survey, site base map indicating probe locations, results, and contamination isocontours.

Include the following information for each probe sample:

- 1) the probe ID number,
- 2) the sample matrix (water, soil or soil vapor),
- 3) the depth at which each sample was collected,
- 4) the analytical results, in parts per billion (ppb) (parts per million (ppm) for soil), for each specified constituent, and
- 5) the date each sample was collected.

3.5.2.2 The Project Geologist will be on-site and oversee the probe survey. The Project Geologist will evaluate probe analytical results to determine placement of subsequent probes. Only the number of probes necessary to complete the goals of the survey should be used.

#### **3.5.3 Drilling Equipment and Methods**

3.5.3.1 Hollow stem augers with a minimum inside diameter (I.D) of 4.25 inches must be used for all drilling activities unless alternate drilling methods have been approved



by KDHE in writing.

If it is necessary to change the drilling method, the Vendor will submit to the KDHE Project Manager, a written description of the proposed change. The request must be submitted under separate letter from the Vendor. KDHE will review the information and provide the Vendor with a written response authorizing or denying the proposed change. All costs associated with unauthorized changes will be the responsibility of the Vendor.

- 3.5.3.2 It is the full responsibility of the Vendor to evaluate the specific site geology and other relevant information in order to determine the drilling method(s) necessary to meet the requirements of the contract and complete the goals of the additional scope of work .
- 3.5.3.3 The selected drilling method must be capable of completing the wells to the depth required without causing the migration or dilution of contamination.
- 3.5.3.4 In unconsolidated environments: if static groundwater level is 40 feet deep or less, the drill rig using hollow stem augers must have a minimum of 3,000 foot pounds of torque. If the static water level is greater than 40 feet deep and less than 70 feet deep, the drill rig using hollow stem augers must have a minimum of 5,500 foot pounds of torque. If the static groundwater level is greater than 70 feet deep and less than 100 feet deep, the drill rig using hollow stem augers must have a minimum of 7,000 foot pounds of torque. If the static groundwater level is greater than 100 feet deep, the drill rig using hollow stem augers must have a minimum of 10,000 foot pounds of torque.

#### **3.5.4 Drilling and Sample Collection Procedures**

- 3.5.4.1 A Field or Project Geologist will be on-site and oversee all drilling and well completion activities and perform all hydrologic testing activities. The Field or Project Geologist will evaluate, describe, and record the lithology, moisture content, odor, and all other observations related to the geology of the site and contamination detected during drilling activities.
- 3.5.4.2 Discrete soil samples will be collected every five feet for the first fifty feet of drilling and every ten feet thereafter using split spoon, shelly tube, or continuous samplers. No composite samples will be approved. All soil samples will be collected in this manner until groundwater is encountered. If alternate drilling methods such as rotary drilling are approved for installing four-inch or larger wells, collection of discrete drilling samples for field screening and laboratory analysis will be up to the discretion of the KDHE Project Manager.
- 3.5.4.3 During the soil sampling process, duplicate soil samples will be collected from each discrete soil sample. One of the samples will be placed in the specified sample container for analysis in the field. The other sample will be immediately placed in

a KDHE Certified Laboratory approved sample container for laboratory analysis.

- 3.5.4.4 The Project Geologist will stamp and sign the Final Report verifying that all the above drilling and sampling procedures were followed as specified in this RFP.

### **3.5.5 Monitoring Wells**

- 3.5.5.1 Wells will be installed by a KDHE licensed water well contractor using hollow stem augers or other approved drilling methods.
- 3.5.5.2 All monitoring wells must be securely covered until completed.
- 3.5.5.3 Monitoring well completions will meet or exceed the KDHE Standard Monitoring Well Design included as ATTACHMENT A, with the following exceptions:
- 1) The screen seal will be a two foot layer of hydrated bentonite (granular, chips, or pellets). The seal will be hydrated with at least five gallons of water for every 50 lb bag of bentonite. Hydration will occur at a minimum after each bag has been placed in the annulus.
  - 2) Wells where the screen seal is less than or equal to 40 feet bgs will be grouted with hydrated bentonite as described in #1 above or with a flowable bentonite grout or cement bentonite. Wells where the screen seal is greater than 40 bgs will be grouted using a flowable bentonite grout or cement bentonite. The flowable grout will be pumped through a tremie pipe with a diameter smaller than the well casing from the screen seal up to the depth specified in Attachment A. Under both scenarios neat cement grout will not be allowed.
  - 3) Any changes to this design must be approved by the KDHE Project Manager in writing, once justification has been supplied regarding a variance from the original design. Flush-mounted wells require a variance from the KDHE Bureau of Water.
- 3.5.5.4 Monitoring well completions less than 100 feet total depth shall be constructed using a minimum of 2 inch inside diameter (I.D.) casing and screen unless otherwise specified in the site specific information. Monitoring well completions to a depth of 100 feet or greater than 100 feet shall be constructed using a minimum of 4 inch I.D. casing and screen.
- 3.5.5.5 The required minimum screen length is outlined in EXHIBIT 1. The screen shall be placed such that an equal amount of screen is above and below the static water level unless otherwise specified by the KDHE Project Manager.
- 3.5.5.6 Although an estimated or approximate depth to groundwater has been provided, the Vendor will be fully responsible for determining the actual depth to groundwater and completing the well(s) to the appropriate depth.

- 3.5.5.7 The Vendor will be fully responsible for determining groundwater flow direction to achieve the goals of the monitoring program.
- 3.5.5.8 All monitoring wells must be properly developed. All monitoring wells will be properly purged as described in 3.3.2.3 before ground water samples are taken.
- 3.5.5.9 All flush mounted cast iron caps are required to be painted with a color that is not consistent with the coloring of the storage tank fill ports. The paint will be applied so as not to obscure the monitoring well or observation well markings on the caps.

### **3.5.6 Waste Disposal and Borehole Plugging**

- 3.5.6.1 Soil borings not completed as monitoring wells will be plugged in accordance with all state regulations and guidelines as outlined in ATTACHMENT B.
- 3.5.6.2 All waste soils and waste water generated during the investigation will be treated and disposed of in accordance with all local, state, and federal requirements.

### **3.5.7 Property Access**

- 3.5.7.1 The Vendor is responsible for contacting all on-site and off-site property owners to obtain access. Initial contact may be verbal, but written permission must be obtained from each owner of each property to be accessed prior to mobilizing equipment to the site to begin probing and/or drilling operations. Required property access includes all properties that have a probe survey, soil boring or monitoring well located on the property in the KDHE approved additional scope of work.

At least two written and two verbal attempts to obtain access will be made. The first will be made within two weeks and the second within three weeks after the contract with the O/O is signed. If no response is received or access is denied from the property owner within two weeks of the initial contact, the KDHE Project Manager should be notified in writing. Written notification should include copies of letters sent and records of verbal attempts such as phone records, field notes and so forth, and request KDHE's assistance in acquiring access.

- 3.5.7.2 For off-site access, the Vendor should use city and utility easements when appropriate and necessary. Written permission to drill in city and utility easements must be obtained prior to equipment mobilization. In such cases, the Vendor must obtain written permission from both the property owner and the entity granting the easement. Copies of all signed access agreements must be included in the appropriate report.

- 3.5.7.3 The Vendor is expected to act in a professional and respectful manner to any local and state agency authorities, utility companies, and the public in general when requesting access.

**3.5.8 Kansas Risk Based Corrective Action (KRBCA)**

**All additional scopes of work for the KRBCA evaluation procedure must be performed in accordance with the current LSA RFP (LSA Rev. 8, 06/2002).**

**SECTION 4.0 DELIVERABLES**

**4.1 PRE-CONTRACT SUBMITTALS**

The Vendor is required to submit, as a part of the proposal, each item requested in the order and format provided below. Certain items (\*) will remain on file with KDHE and, once submitted, re-submittal will be necessary **only** when changes are made. The Vendor must specifically state each item omitted from the submittal package and include an explanation.

- 4.1.1 A cover letter from the Vendor
- 4.1.2 Two copies of properly completed monitoring bid proposal sheets (see EXHIBIT 2)
- 4.1.3 Copy of Insurance Certificate\*
- 4.1.4 Resumes of all personnel proposed for the project, and current OSHA safety training certification of all personnel proposed to conduct field activities for the project\*
- 4.1.5 Complete list of equipment\*
- 4.1.6 Quality Assurance and Quality Control (QA/QC) plan\*
- 4.1.7 Workers Compensation Log & Summary of Occupational Injuries & Illness (OSHA form G200)\*
- 4.1.8 List of all sub-contractors with a description of their duties and, if applicable, copies of their OSHA safety training certificates. If the sub-contractor is to serve as the Vendor's Project Geologist or Sampling Technician, a copy of their resume is to be submitted to KDHE indicating their qualifications as outlined in Section 1.3.8, 1.3.9 or 1.3.10 respectively.

**4.2 REPORTS**

- 4.2.1 All reports will include a cover page with the following information: title; site name; site address; KDHE project code, report date, and the name of the person who prepared the report. The cover page must be stamped and signed by a Kansas Licensed Professional.

- 4.2.2 Two copies of each report will be submitted to the KDHE Project Manager and one copy will be submitted to the O/O. Reports must be stapled and not bound.
- 4.2.3 The Vendor will submit two copies of the first quarterly report within (8) weeks following the contract signature date. Subsequent monitoring reports will be submitted every 90 days following the first report submittal, or other frequency as stated in the SSI, for the duration of the monitoring program. Due dates for reports are firm. The initial due date may be negotiated with the Project Manager prior to the renewal of any contract.
- 4.2.3.1 Report costs will be denied for reports received 1-30 days late. All costs associated with an event will be denied if the report is received more than 30 days late. All reports received after the due date will affect the vendor's eligibility for future Trust Fund Work. If a report is not received the vendor will jeopardize vendor eligibility and be in violation of their contract with the O/O.
- 4.2.3.2 Reports received with missing or inaccurate documentation may be rejected as determined by the KDHE Project Manager. If a report is rejected a new report will have to be resubmitted. Due dates will not be extended for resubmitted reports.

#### **4.2.4 SAMPLING REPORT FORMAT:**

The Sampling Report will include all information outlined below in the format and order described:

Each report will start with the Project Name, site address, KDHE Project Code, and the current sampling event number for the current scope of work (i.e. first of four).

#### **SECTION 1.0 DISCUSSION**

The discussion should be concise and site specific. Do not include information detailing standard operating procedures.

- 1) Provide a brief overview of the monitoring conducted for the present sampling event; e.g., number of groundwater samples collected, site observations, well condition, etc. Provide an explanation as to when or why a well was not sampled, plugged, or not located.
- 2) Describe the contamination detected for the present sampling event; horizontal extent, degree, migration, and any impact or potential impact to sensitive environments, or public and private water supplies.
- 3) Observations from the current sampling event, which shall consist of a brief discussion of groundwater elevation, groundwater flow direction, and contaminant degree and distribution; note whether or not any changes have occurred since the last event, and if any wells need repairs or replacement.

## **SECTION 2.0            TABLES**

For each well sampled, include the following information for each of the eight most recent groundwater and petroleum product laboratory analysis. Present results from each sample point in chronological order with all available data being included within the tables for the eight most recent events. See example in EXHIBIT 1.

### **TABLE 1.0**

- 1.1) Well ID number.
- 1.2) The concentrations of each specified constituent in parts per billion (ppb).
- 1.3) The date each sample was collected.
- 1.4) The EPA testing method and laboratory analytical detection limit.

### **TABEL 2.0**

- 2.1) Well ID number.
- 2.2) Elevations: top of casing, depth to water, depth to product, etc.; corrected water elevation should be calculated and used if product is present.
- 2.3) The volume of water purged from the well prior to sampling.
- 2.4) The date the well was purged.
- 2.5) The type of product identified and measured amount.

### **TABLE 3.0**

- 3.1) Well ID number.
- 3.2) Well Tag # removed.
- 3.3) Well Tag # installed.

## **SECTION 3.0            MAPS**

All maps must be labeled with the titles provided. The site map from the final report (see EXHIBIT 1) should be used as the base map for locating wells and the first sampling event. A new site base map is required and must be drawn to scale; the scale must be such that 1 inch  $\leq$  50 feet for smaller sites and 1 inch  $\leq$  100 feet for larger sites. Include a north arrow, graphic scale, and legend on all maps. Only include items in the legend that occur at the site. The maps must be submitted in CAD format (or similar); hand drafted base maps are not acceptable. The maps must also include all wells not sampled that have been associated with the site noting their designation as lost, destroyed, plugged etc. All maps must be updated if business name changes and/or site alterations have occurred due to construction activities.

### **Figure 1 Groundwater Flow Map**

A map representing the exact location of the site benchmark(s) and each well relative to the site benchmark. Label each well with the well ID, the elevation of each well (casing), static groundwater elevation, labeled equipotential contours, and arrow(s) indicating predominant flowpaths and direction. Show flow line used for calculating hydraulic gradient.

### **Figure 2 Groundwater Isoconcentration Maps**

Develop a Groundwater Isoconcentration Map for Total BTEX. Use the site map as a template. Sample points shall be labeled with concentrations in ppb. The isoconcentration map shall include the location of all sampling points. Isocontour lines shall be labeled with concentrations in ppb. Include map with the data plotted, but do not draw isocontours, if contaminant is detected in two or less wells. Other isoconcentration maps can be required at a later date, and should be bid as individual maps (see Section 6.0).

### **Figure 3 Separate Phase Product Isopach Map**

The Isopach Map shall include the location of all monitoring wells or sampling points. Develop an Isopach Map any time separate phase product is detected. If product is detected in two or less wells, product isopachs can be plotted on the Total BTEX Map as long as the projected product extent and thickness is clearly marked or shaded.

## **SECTION 4.0 DOCUMENTATION**

Include all information requested in the following format. Do not reference or include in this section any discussion, tables, photographs, maps, or other documents that are included in this report or any other report.

### **Appendix 1 Laboratory Data**

Include all analytical laboratory reports and Chain of Custody documents. All lab reports must include the following QA/QC data for all samples:

- 1) Calibration check against the true value or initial calibration every 20 samples.
- 2) Surrogate % recovery for each water sample.
- 3) Matrix spike for each constituent every 20 samples or each batch run.
- 4) Method blank for each batch or extraction.
- 5) Trip Blank for each shipping container, excluding product containers.

Reporting limits for all samples must be the Practical Quantification Limit (PQL) for that sample. Reporting limits set at the MCL are not acceptable. Include results of free product analyses (including laboratory chromatograph) if applicable.

## **Appendix 2 Field Notes**

All field notes recording product level and thickness, water level, and total depth measured in each well, and the volume of water purged prior to sampling. If a well is not located, document the length of time and method used to locate wells that were approved for sampling.

### **4.3 ADD SCOPE DELIVERABLES**

- 4.3.1 Two copies of all data, reports, or other requested information must be submitted as specified by the Project Manager in the approval letter for each additional scope of work.
- 4.3.2 Add Scope deliverables received after the due date set by the KDHE Project Manager will be penalized as determined by KDHE.



## **SECTION 5.0 REIMBURSEMENT**

### **5.1 REIMBURSEMENT GUIDELINES**

- 5.1.1 All Vendor invoices must be submitted to the O/O for payment.
- 5.1.2 Total reimbursement will not exceed the lesser of the actual costs incurred for each line item or the total cost for each line item in the Project Bid Proposal Sheet unit pricing.
- 5.1.3 The Vendor will only receive payment for work conducted and accepted in accordance with the specifications outlined in this document.
- 5.1.4 Payment to the Vendor will be prorated in accordance with actual work performed (i.e. if only 50% of the scheduled samples are required, 50% of the field hours will be reimbursed). The following categories will be prorated: On-Site Waste Handling and Treatment, Sampling Hours, and Analytical. Staff travel time and vehicle per/mile line items for an event will not be prorated.
- 5.1.5 The Vendor may submit invoices for reimbursement following the submittal of a completed sampling report. Reimbursement will be for 100% upon approval of the report by the KDHE Project Manager.
- 5.1.6 Reimbursements for reports received after the due date are indicated in 4.2.3.1.

### **5.2 DOCUMENTATION REQUIREMENTS**

- 5.2.1 Vendor invoices submitted for reimbursement must use the same line item format as the Bid Proposal Sheets.

## **SECTION 6.0 PROPOSAL AND WORK SPECIFIC DEFINITIONS**

### **6.1 PROPOSAL DEFINITIONS**

#### **6.1.1 INITIAL TASKS**

Costs for some tasks will be reimbursable only once during the monitoring program. These will usually be line items needed for the first sampling event and report submittal, and may include costs associated with site reconnaissance to find the monitoring wells, preparation of a CAD site base map, collection and analysis of a product sample, an RLS survey, and other items KDHE has determined will be necessary on a site by site basis. Each task should be bid on the unit basis specified in EXHIBIT 2.

#### **6.1.2 ISOCONCENTRATION MAP**

This item shall include all costs associated with the preparation of an additional isoconcentration map to be included in a sampling event report. This item shall be on a per map basis and **should not** be included in the total proposed cost. This item will be used ONLY if KDHE changes the original scope to include an isoconcentration map not specified in the SSI in EXHIBIT 1. Costs for preparing all isoconcentration maps specified in the original scope must be included in the line item "Sampling Event Report".

#### **6.1.3 LAB METHODS**

This item shall state the EPA method(s) (see ATTACHMENT C) to be used for laboratory analysis of water samples.

#### **6.1.4 LABORATORY NAME**

This item shall name the KDHE-approved laboratory that will be performing the analyses of water and soil samples.

#### **6.1.5 MOBILIZATION**

This item shall include the cost for each vehicle(s) necessary to transport staff and equipment to conduct the monitoring. This item will be bid on a per mile basis. Staff time will not be included on this line item. Staff time for mobilization will have a separate staff travel time line item.

#### **6.1.6 OTHER**

This item shall include all costs not included in other items of the cost proposal sheet. If this

category is used, the bidder must list each item and briefly explain its function.

#### **6.1.7 PER DIEM**

This item shall be a fixed price for one person to cover lodging and expenses. Per Diem will be approved only for each night an employee is required to stay away from their work station to complete the assigned task(s). This would be applicable for large sites that require two days to complete sampling, or where multiple sites are being sampled in the same vicinity. The per diem will be allocated to save on mobilization costs.

#### **6.1.8 PRODUCT SAMPLES**

This item shall include the total costs associated with the collection and analysis of the product sample(s) (i.e., labor, equipment, shipping, etc.). The purpose of the product sample(s) is to determine what petroleum products (kerosene, used motor oil, diesel, weathered/unweathered gasoline, fuel oil, jet fuel, etc.) are present, including any not previously known to be present, that may affect selection of an appropriate remediation design or alter the threat posed by the release being monitored. Provide the cost for analysis and all associated costs on a per sample basis.

#### **6.1.9 SAMPLE ANALYSIS**

This item shall include all costs associated with the collection and analysis of water samples (i.e., purging, equipment, shipping, etc.). All samples shall be analyzed in accordance with the criteria provided in this document for the constituents outlined in the bid sheet. This item must be bid on a per sample basis. If additional analyses are required, reimbursement will be on a per sample basis.

#### **6.1.10 SAMPLING EVENT REPORT**

This item will include all costs, including drafting of all maps specified in the SSI in EXHIBIT 1, clerical staff time, photocopies, mailing, etc. associated with preparation and submittal of the sampling event report as described in SECTION 4.2 of this RFP. This item will be bid on a Lump Sum basis for the number of events specified.

#### **6.1.11 SAMPLING TECHNICIAN**

This item shall include all costs associated with collecting the number of samples specified in EXHIBIT 2 (opening of well, water/product measurements, purging, recording, etc.). This item will be bid on a per hour basis.

#### **6.1.12 STAFF TRAVEL TIME**

This item will include all costs associated with staff time traveling to a site during the mobilization. This item will be bid on a per hour basis.

#### **6.1.13 WASTE WATER HANDLING AND TREATMENT**

This item shall include the cost to handle, treat and dispose of waste water generated during field activities. Methods for handling and treating development and purge water will be as follows: air stripping, granulated activated carbon or other treatment may be acceptable. The Vendor will properly dispose of development water when the Vendor obtains approval from the appropriate authority. **All applied methods must comply with local, state, and federal laws.** These handling and treatment methods are not approved for free product. **NO** water is to be stored on site.

